AMENDMENTS TO THE CLAIMS

All claims are shown below. Please amend the claims as follows:

1. (Currently amended) A method of caching in a system for transmitting a plurality of media data titles to one or more client(s) from a central server computer system and a proxy server computer system located in a computer network, said proxy server computer system located in the network between the central server computer system and the one or more client(s), wherein each media data title is divided into blocks to be transmitted to the one or more client(s) in a time sequence, and each block is divided into sub-blocks, comprising:

causing the central server computer system to transmit data in the media data titles to the proxy server computer system via a backbone network connection, and the proxy server computer system to transmit data in the media data titles to one or more client(s) via a local network connection;

identifying which sub-blocks from different blocks of each media data title that are to be cached, wherein the identified sub-blocks include some but not all-sub-blocks in each of the blocks of at least one media data title;

caching only the identified sub-blocks at the proxy server computer system to reduce the transmission bit rate of the central server computer system in the network for transmitting data in the media data titles to the proxy server computer system; and

combining sub-blocks of a media data title cached at the proxy server computer system with sub-blocks of the media data title not cached at the proxy server computer system and transmitted from the central server computer system to the proxy server computer system through the network, for delivery to the one or more client(s), wherein a peak transmission rate in the backbone network connection for the central server computer system to transmit data in the media data titles to the proxy server computer system is reduced.

wherein the media data titles include video titles, and the sub-blocks comprise partial information of video frames, wherein the video frames are to be transmitted sequentially, wherein the combining combines the partial information of video frames from the proxy server computer system with complementary partial information of such video frames from the central

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server computer system into complete video frames and sending the complete video frames to the client(s); and

wherein the partial information comprise video information obtained at a set of sampling times and at a first sampling rate lower than that of a video source from which said information originates, and wherein the combining combines the video information at the lower first sampling rate from the proxy server computer system with complementary video information taken at sampling times different from the set of sampling times of such video frames from the central server computer system into video data at a sampling rate higher than the first sampling rate and sending the video data at the higher sampling rate to the client(s).

- 2. (Previously presented) The method of claim 1, wherein the cached sub-blocks are cached for time periods that are independent of time.
- 3. (Currently amended) The method of claim 1, wherein the caching caches substantially the same number of sub-blocks from each block of said at least one media data title.

4.-5. (Cancelled).

6. (Currently Amended) The method of claim 15, wherein the partial information comprise video information along some scan lines of video frames, further comprising combining the video information along such scan lines with complementary video information along other scan lines of such video frames from the central server computer system into complete video frames and sending the complete video frames to the client(s).

7. (Cancelled).

8. (Currently Amended) The method of claim 15, wherein the partial information comprise video information in a basic layer and the complementary partial information comprises video information in an enhancement layer, said basic and enhancement layers being defined according to spatial, signal-to-noise or temporal scalability.

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- 9. (Currently amended) The method of claim 1, wherein the identifying is made as a function of an access profile of the <u>media data</u> titles at the proxy.
- 10. (Currently amended) The method of claim 1, wherein prior to any accesses of the media data titles by the client(s), an average caching approach utilizes storage at the proxy server computer system by storing a substantially equal number of sub-blocks from each media data title.
- 11. (Currently amended) The method of claim 1, wherein prior to any accesses of the media data titles by the client(s), a proportional caching approach utilizes access history data to determine how much of each media data title to cache.
- 12. (Currently amended) The method of claim 1, wherein after the system starts operation, cache content at the proxy server computer system will change from time to reflect actual access behavior.
- 13. (Currently amended) The method of claim 1, further comprising beginning a caching process at the proxy server computer system after receiving a media data -title request from a client by ensuring there is sufficient bandwidth from said proxy to such client to deliver the request and if not, denying the request.
- 14. (Currently amended) The method of claim 13, further comprising delivering the complete content of the requested media data title when such content is in local storage of said proxy server computer system.
 - 15. (Currently amended) The method of claim 13, further comprising:

when said proxy server <u>computer system</u> does not have complete content of the requested <u>media data</u> title, determining if there is sufficient available backbone bandwidth to carry said <u>media data</u> title from the central server <u>computer system</u> to said proxy server <u>computer system</u> and if not, rejecting the request.

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- 16. (Currently amended) The method of claim 15, further comprising activating a progressive caching process to adjust cache content at said proxy server <u>computer system</u> to reflect the requested <u>media data</u> title.
- 17. (Currently amended) The method of claim 1, further comprising replacing a cached portion of a particular media data title by deleting the most recently cached portion of such media data title.
- 18. (Currently amended) The method of claim 1, further comprising deciding which media data titles shall be subject to caching replacement using a most current access profile as an indication of a future profile.
- 19. (Currently amended) The method of claim 1, further comprising keeping track of each access request at the proxy server <u>computer system</u> in order to determine which <u>media data</u> titles shall be subject to caching replacement.
- 20. (Currently amended) The method of claim 1, further comprising deciding which media data titles shall be subject to caching replacement using a current access profile as an indication of the future profile, wherein said deciding includes:

defining a time window ending at the time of the caching replacement;

calculating an access frequency of each <u>media data</u> title in a storage of the proxy server <u>computer system</u>, said access frequency being a function of the accesses to such <u>media data</u> title during the time window or a portion thereof; and

performing the caching replacement in response to the access frequencies of the media data titles in the storage.

21. (Currently amended) The method of claim 20, wherein said access frequency is proportional to the sum of the accesses to such media data title during the time window or a portion thereof.

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- 22. (Currently amended) The method of claim 20, wherein said access frequency is proportional to a time-weighted sum of the accesses to such media data title during the time window or a portion thereof, with the time weighting in favor of accesses occurring more recently in the window.
- 23. (Currently amended) The method of claim 1, further comprising detecting multiple ongoing requests from clients for a media data title received at different times during caching in response to an initial request of said media data title, and increasing the number of sub-blocks cached from the blocks of at least one media data title in response to a subsequent request of said media data title.

24-27. (Cancelled)

- 28. (Currently amended) A system for delivering media information; the system comprising:
- a plurality of proxy server computer systems, each servicing a number of terminal devices via a local network connection and receiving a request from one of said terminal devices when a user of said one of said terminal devices desires for a media titlemedia data title among a plurality of media titlemedia data titles, said media data titles divided into units that are transmitted in a time sequence to one or more of the terminal devices; each of said proxy server computer systems comprising a cache memory for storing information in units of at least some of the media titlemedia data titles; wherein amount of information in the units of each of said at least some media data titles stored and/or replaced in the cache memory is determined by a request frequency to said each of said media data titles; and

a central media-server computer system coupled to said proxy server computer systems via a backbone connection in a network, said proxy server computer systems located in the network between the central server computer system and one or more client(s), wherein the central server computer system transmits data in the media data titles to the proxy server computer systems, and each of the proxy server computer systems transmits data in the media data titles to one or more terminal devices:

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said central media-server computer system having a storage space for storing a plurality of said media data titles and providing data from one or more of said media data titles when receiving a proxy request from one of said proxy server computer systems, wherein the units of at least one of said media-titlemedia data titles containing information cached in the cache memory of said one proxy server computer system are divided into sub-blocks, and wherein the sub-blocks stored in the cache memory of said one proxy server computer system include some but not all-sub-blocks in each of the units of said at least one media data title,

said one proxy server computer system combining the sub-blocks in cached units with uncached sub-blocks in units received through the network from the central server computer system to form a data stream of complete media data title(s) and transmitting the combined sub-blocks in units of such media data title(s) to one or more terminal devices, so that the transmission bit rate of the central media-server computer system in the backbone connection of the network for transmitting data from the at least some media data titles to said one of the proxy server computer systems is reduced;

wherein the media data titles include video titles, and the sub-blocks comprise partial information of video frames, wherein the video frames are to be transmitted sequentially, wherein said one proxy server computer system combines the partial information of video frames from the proxy server computer system with complementary partial information of such video frames from the central server computer system into complete video frames and sending the complete video frames to the client(s);

wherein the partial information comprise video information obtained at a set of sampling times and at a first sampling rate lower than that of a video source from which said information originates, and wherein said one proxy server computer system combines the video information at the lower first sampling rate from the proxy server computer system with complementary video information taken at sampling times different from the set of sampling times of such video frames from the central server computer system into video data at a sampling rate higher than the first sampling rate and sending the video data at the higher sampling rate to the client(s).

29. (Currently amended) A system for delivering media information; the system comprising:

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a plurality of proxy server computer systems, each servicing a number of terminal devices and receiving a request from one of said terminal devices when a user of said one of said terminal devices desires a media titlemedia data title from a plurality of media title media data titles; wherein at least one of said proxy server computer systems comprises a cache memory; and

a central server computer system coupled to said proxy server computer systems in a network, said proxy server computer systems located in the network between the central server computer system and one or more client(s), wherein the central server computer system transmits data in the media data titles to the proxy server computer systems, and the proxy server computer systems transmit data in the media data titles to one or more client(s); said central server computer system having a storage space for storing a plurality of said media data titles and providing data from one of said media data titles when receiving a proxy request from said at least one of said proxy server computer systems, said cache memory of said at least one proxy server computer system caching only some but not all of the units of said at least one media titlemedia data title, said at least one proxy server computer system combining the cached units with uncached units received through the network from the central server computer system to form a data stream of a complete media title media data title and transmitting such media data title to one or more client(s), so that the transmission bit rate of the central server computer system in the network for transmitting the at least one media data title to said at least one proxy server computer system is reduced, wherein said at least one of said media titlemedia data titles includes video frames to be transmitted in a time sequence, each frame being divided into subblocks, each of the sub-blocks comprising partial information of a video frame, wherein said units of said at least one media-titlemedia data title cached at said proxy server computer system comprise partial information of substantially all of the video frames in said at least one media titlemedia data title, so that said one proxy server computer system combines the cached partial information of substantially all of the video frames in said at least one media titlemedia data title with complementary partial information of such video frames from the central server computer system into complete video frames and sends the complete video frames to terminal devices;

wherein the partial information comprise video information obtained at a set of sampling times and at a first sampling rate lower than that of a video source from which said information originates, and wherein said one proxy server computer system combines the video information

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at the lower first sampling rate from said one proxy server computer system with complementary video information taken at sampling times different from the set of sampling times of such video frames from the central server computer system into video data at a sampling rate higher than the first sampling rate and sending the video data at the higher sampling rate to terminal devices.

- 30. (Currently amended) The system of claim 29, wherein said at least one proxy server computer system stores the units of the at least one <u>media data</u> title for time periods that are independent of time.
- 31. (Currently amended) The system of claim 29, wherein the at least one media data title is divided into blocks to be transmitted to the one or more user(s) in a time sequence, and each block is divided into sub-blocks, wherein the at least one proxy server computer system caches the same number of sub-blocks from each block of said at least one media data title.

32. - 33. (Cancelled).

- 34. (Previously presented) The system of claim 29, wherein the partial information comprise video information along some scan lines of video frames, and wherein the at least one proxy server computer system combines the video information along such scan lines with complementary video information along other scan lines of such video frames from the central server computer system into complete video frames and sends the complete video frames to the user(s).
 - 35. (Cancelled).
- 36. (Currently amended) The system of claim <u>2932</u>, wherein the sub-blocks comprise information in a base layer of a scalable multilayer system.
- 37. (Currently amended) The system of claim 29, where the number of units is a function of an access profile of the at least one media data title at the at least one proxy server computer system.

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38. (Currently amended) A method of caching in a system for transmitting a plurality of media data titles to one or more client(s) from a central server computer system and a proxy server computer system in a network, said proxy server computer system located in the network between the central server computer system and the one or more client(s), wherein each media data title is divided into blocks to be transmitted to the one or more client(s) in a time sequence, and each block is divided into sub-blocks, comprising:

identifying which sub-blocks from different blocks of each <u>media data</u> title that are to be cached, wherein the identified sub-blocks include sub-blocks that are distributed over the blocks of at least one <u>titlemedia data title</u>;

caching only the identified sub-blocks at the proxy server computer system to reduce the transmission bit rate of the central server computer system in the network for transmitting data in the <u>media</u> data titles to the proxy server computer system; and

combining sub-blocks of a media data title cached at the proxy server computer system with sub-blocks of the titlemedia data title not cached at the proxy server computer system and transmitted from the central server computer system through the network to the proxy server computer system, for delivery to the one or more client(s), wherein the cached sub-blocks of at least one of said media titlemedia data titles comprise partial information of video frames, wherein the video frames are to be transmitted sequentially, and wherein said one proxy server computer system combines the cached partial information of video frames with complementary partial information of such video frames from the central server computer system into complete video frames and sends the complete video frames to the one or more client(s);

wherein the partial information comprise video information obtained at a set of sampling times and at a first sampling rate lower than that of a video source from which said information originates, and wherein said combining combines the video information at the lower first sampling rate from the proxy server computer system with complementary video information taken at sampling times different from the set of sampling times of such video frames from the central server computer system into video data at a sampling rate higher than the first sampling rate and sending the video data at the higher sampling rate to the client(s).

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- 39. (Previously presented) The method of claim 38, wherein the cached sub-blocks are stored for time periods that are independent of time.
- 40. (Currently amended) The method of claim 38, wherein the caching caches the same number of sub-blocks from each block of said at least one titlemedia data title.
- 41. (Currently amended) A computer readable storage device embodying a program of instructions executable by a computer to perform a method of caching in a system for transmitting a plurality of media data titles to one or more client(s) from a central server computer system and a proxy server computer system in a network, said proxy server computer system located in the network between the central server computer system and the one or more client(s), wherein each titlemedia data title is divided into blocks to be transmitted to the one or more client(s) in a time sequence, and each block is divided into sub-blocks, said method comprising:

identifying which sub-blocks from different blocks of each titlemedia data title that are to be cached, wherein the identified sub-blocks include sub-blocks that are distributed over the blocks of at least one titlemedia data title;

caching the identified sub-blocks under the control of the proxy server computer system to reduce the transmission bit rate of the central server computer system in the network for transmitting data in the media data titles to the proxy server computer system; and

combining sub-blocks of a titlemedia data title cached at the proxy server computer system with sub-blocks of the titlemedia data title not cached at the proxy server computer system and transmitted from the central server computer system through the network to the proxy server computer system, wherein the cached sub-blocks of at least one of said media titlemedia data titles comprise partial information of video frames, wherein the video frames are transmitted sequentially to the one or more client(s), and wherein said one proxy server computer system combines the cached partial information of video frames with complementary partial information of such video frames from the central server computer system into complete video frames and sends the complete video frames to the one or more client(s);

wherein the partial information comprise video information obtained at a set of sampling times and at a first sampling rate lower than that of a video source from which said information

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originates, and wherein said combining combines the video information at the lower first sampling rate from the proxy server computer system with complementary video information taken at sampling times different from the set of sampling times of such video frames from the central server computer system into video data at a sampling rate higher than the first sampling rate and sending the video data at the higher sampling rate to the client(s).

- 42. (Previously presented) The device of claim 41, wherein the cached sub-blocks are stored for time periods that are independent of time.
- 43. (Currently amended) The device of claim 41, wherein the caching caches substantially the same number of sub-blocks from each block of said at least one titlemedia data title.

44. - 45. (Cancelled)

46. (Currently amended) The device of claim 415, wherein the partial information comprise video information along some scan lines of video frames, said method further comprising combining the video information along such scan lines with complementary video information along other scan lines of such video frames from the central server computer system into complete video frames and sending the complete video frames to the client(s).

47. (Cancelled)

- 48. (Currently amended) The device of claim 415, wherein the partial information comprise video information in a basic layer and the complementary partial information comprises video information in an enhancement layer, said basic and enhancement layers being defined according to spatial, signal-to-noise or temporal scalability.
- 49. (Currently amended) The device of claim 41, wherein the identifying is made as a function of an access profile of the titlemedia data titles at the proxy server computer system.

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- 50. (Currently amended) The device of claim 41, wherein prior to any accesses of the titlemedia data titles by the client(s), an average caching approach utilizes storage at the proxy server computer system by storing a substantially equal number of sub-blocks from each titlemedia data title.
- 51. (Currently amended) The device of claim 41, wherein prior to any accesses of the titlemedia data titles by the client(s), a proportional caching approach utilizes access history data to determine how much of each titlemedia data title to cache.
- 52. (Previously presented) The device of claim 41, wherein after the system starts operation, cache content at the proxy server computer system will change from time to reflect actual access behavior.
- 53. (Currently amended) The device of claim 41, said method further comprising beginning a caching process at the proxy server <u>computer system</u> after receiving a <u>title media data</u> <u>title</u> request from a client by ensuring there is sufficient bandwidth from said proxy server computer system to such client to deliver the request and if not, denying the request.
- 54. (Currently amended) The device of claim 53, said method further comprising delivering the complete content of the requested <u>titlemedia data title</u> when such content is in local storage of said proxy server computer system.
- 55. (Currently amended) The device of claim 53, said method further comprising: when said proxy server computer system does not have complete content of the requested titlemedia data title, determining if there is sufficient available backbone bandwidth to carry said titlemedia data title from the central server computer system to said proxy server computer system and if not, rejecting the request.
- 56. (Currently amended) The device of claim 55, said method further comprising activating a progressive caching process to adjust cache content at said proxy server computer system to reflect the requested titlemedia data title.

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- 57. (Currently amended) The device of claim 41, said method further comprising replacing a cached portion of a particular titlemedia data title by deleting the most recently cached portion of such titlemedia data title.
- 58. (Currently amended) The device of claim 41, said method further comprising deciding which titlemedia data titles shall be subject to caching replacement using a most current access profile as an indication of a future profile.
- 59. (Currently amended) The device of claim 41, said method further comprising keeping track of each access request at the proxy server computer system in order to determine which titlemedia data titles shall be subject to caching replacement.
- 60. Currently amended) The device of claim 41, said method further comprising deciding which titlemedia data titles shall be subject to caching replacement using a current access profile as an indication of the future profile, wherein said deciding includes:

defining a time window ending at the time of the caching replacement;

calculating an access frequency of each titlemedia data title in a storage of the proxy server computer system, said access frequency being a function of the accesses to such titlemedia data title during the time window or a portion thereof; and

performing the caching replacement in response to the access frequencies of the titlemedia data titles in the storage.

- 61. (Currently amended) The device of claim 60, wherein said access frequency is proportional to the sum of the accesses to such <u>title</u> during the time window or a portion thereof.
- 62. (Currently amended) The device of claim 60, wherein said access frequency is proportional to a time-weighted sum of the accesses to such titlemedia data title during the time window or a portion thereof, with the time weighting in favor of accesses occurring more recently in the window.

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63. (Currently amended) The device of claim 41, said method further comprising detecting multiple ongoing requests from clients for a <u>titlemedia data title</u> received at different times during caching in response to an initial request of said <u>titlemedia data title</u>, and increasing the number of sub-blocks cached from the blocks of at least one <u>titlemedia data title</u> in response to a subsequent request of said <u>titlemedia data title</u>.

64 - 67. (Cancelled)

68. (Currently amended) A method for transmitting a program of instructions executable by a computer to perform a process of caching in a system for transmitting a plurality of media data titles to one or more client(s) from a central server computer system and a proxy server computer system in a network, said proxy server computer system located in the network between the central server computer system and the one or more client(s), wherein each titlemedia data title is divided into blocks to be transmitted to the one or more client(s) in a time sequence, and each block is divided into sub-blocks, said method comprising:

transmitting to a client device a program of instructions; and

enabling the client device to perform, by means of such program, the following process:

identifying which sub-blocks from different blocks of each titlemedia data title that are to be cached, wherein the identified sub-blocks include sub-blocks that are distributed over the blocks of at least one titlemedia data title; and

caching the identified sub-blocks under the control of the proxy server <u>computer system</u> to reduce the transmission bit rate of the central server computer system in the network for transmitting data in the media data titles to the proxy server computer system; and

combining sub-blocks of a titlemedia data title cached at the proxy server computer system with sub-blocks of the titlemedia data title not cached at the proxy server computer system and transmitted from the central server computer system through the network to the proxy server computer system, for delivery to the one or more client(s), wherein at least one of said media titlemedia data titles cached includes a titlemedia data title divided into blocks to be transmitted in a time sequence, and each block is divided into sub-blocks some of which are cached, and the cached sub-blocks comprise partial information of video frames, wherein the

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video frames are to be transmitted sequentially, and wherein said proxy server computer system combines the partial information of video frames with complementary partial information of such video frames from the central server computer system into complete video frames and sends the complete video frames to client(s);

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wherein the partial information comprise video information obtained at a set of sampling times and at a first sampling rate lower than that of a video source from which said information originates, and wherein said combining combines the video information at the lower first sampling rate from the proxy server computer system with complementary video information taken at sampling times different from the set of sampling times of such video frames from the central server computer system into video data at a sampling rate higher than the first sampling rate and sending the video data at the higher sampling rate to the client(s).

- 69. (Previously presented) The method of claim 68, wherein the program enables the cached sub-blocks to be stored for time periods that are independent of time.
- 70. (Currently amended) The method of claim 68, wherein the program enables the caching to cache substantially the same number of sub-blocks from each block of said at least one titlemedia data title.
 - 71. (Cancelled).
- 72. (Original) The method of claim 71, wherein the partial information comprise video information in a basic layer and the complementary partial information comprises video information in an enhancement layer, said basic and enhancement layers being defined according to spatial, signal-to-noise or temporal scalability.
- 73. (Currently amended) The method of claim 68, wherein the identifying is made as a function of an access profile of the titlemedia data titles at the proxy.

74-79. (Cancelled)

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- 80. (Currently amended) The system of claim 29, wherein the central server computer system transmits data in the media data titles to the at least one proxy server computer system via a backbone network connection, and the at least one proxy server computer system transmits data in the media data titles to one or more client(s) via a local network connection, and wherein a peak transmission rate in the backbone network connection for the central server computer system to transmit data from the at least some titlemedia data titles to the at least one proxy server computer system is reduced.
- 81. (Currently amended) The method of claim 38, further comprising causing the central server computer system to transmit data in the media data titles to the proxy server computer system via a backbone network connection, and the proxy server computer system to transmit data in the media data titles to one or more client(s) via a local network connection; wherein a peak transmission rate in the backbone network connection for the central server computer system to transmit data in the titlemedia data titles to the proxy server computer system is reduced.
- 82. (Currently amended) The device of claim 41, said method further comprising causing the central server <u>computer system</u> to transmit data in the <u>media</u> data titles to the proxy server <u>computer system</u> via a backbone network connection, and the proxy server <u>computer system</u> to transmit data in the <u>media</u> data titles to one or more client(s) via a local network connection; wherein a peak transmission rate in the backbone network connection for the central server <u>computer system</u> to transmit data in the <u>titlemedia data titles</u> the proxy server <u>computer system</u> is reduced.
- 83. (Currently amended) The method of claim 68, further comprising causing the central server computer system to transmit data in the media data titles to the proxy server computer system via a backbone network connection, and the proxy server computer system to transmit data in the media data titles to one or more client(s) via a local network connection;

wherein a peak transmission rate in the backbone network connection for the central server <u>computer system</u> to transmit data in the <u>titlemedia data titles</u> to the proxy server <u>computer system</u> is reduced.

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- 84. (Currently amended) The method of claim 38, said sub-blocks of said at least one media-titlemedia data title cached at said proxy server computer system comprise partial information of substantially all of the video frames in said at least one media titlemedia data title.
- 85. (Currently amended) The device of claim 41, said sub-blocks of said at least one media titlemedia data title cached at said proxy server computer system comprise partial information of substantially all of the video frames in said at least one media titlemedia data title.
- 86. (Currently amended) The method of claim 68, said sub-blocks of said at least one media titlemedia data title cached at said proxy server computer system comprise partial information of substantially all of the video frames in said at least one media titlemedia data title.
- 87. (Currently amended) A method of caching in a system for transmitting a plurality of media data titles to one or more client(s) from a central server computer system and a proxy server computer system located in a computer network, said proxy server computer system located in the network between the central server computer system and the one or more client(s), wherein each media data title is divided into blocks each divided into sub-blocks comprising partial information of video frames, wherein the video frames are to be sequentially transmitted to the one or more client(s), comprising:

causing the central server computer system to transmit data in the media data titles to the proxy server computer system via a backbone network connection, and the proxy server computer system to transmit data in the media data titles to one or more client(s) via a local network connection;

identifying which sub-blocks from different blocks of each media data title that are to be cached, wherein the identified sub-blocks include some but not all sub-blocks in each of the blocks of at least one media data title:

caching only the identified sub-blocks at the proxy server computer system to reduce the transmission bit rate of the central server computer system in the backbone network connection for transmitting data in the at least one media data title to the proxy server computer system; and

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transmitting sub-blocks of the media data titles cached at the proxy server computer system to the one or more client(s);

wherein the cached sub-blocks comprise partial video frames obtained at a set of sampling times and at a first sampling rate lower than that of a video source from which said information originates, said method further comprising combining the cached sub-blocks at the lower first sampling rate from the proxy server computer system with complementary uncached sub-blocks of such video frames taken at sampling times different from the set of sampling times of such video frames from the central server computer system into video data at a sampling rate higher than the first sampling rate and sending the video data at the higher sampling rate to the client(s).

- 88. (Currently amended) The method of claim 87, wherein said blocks comprise video frames-, and the sub-blocks comprise video information along some scan lines of the video frames so that the transmitting transmits some scan lines of the video frames.
- 89. (Previously presented) The method of claim 87, wherein said transmitting transmits some scan lines that are evenly spaced across the video frames.
- 90. (Currently amended) The method of claim 87, said sub-blocks of said at least one media-titlemedia data title cached at said proxy server computer system comprise partial information of substantially all of the video frames in said at least one media titlemedia data title.